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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,047	11/13/2001	Peter Wangqi Hou	0082-IS	6307

7590 01/30/2004
Michael P. Dilworth
CROMPTON CORPORATION
Benson Road
Middlebury, CT 06749

EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,047	Applicant(s) HOU ET AL.	
	Examiner Philip C Tucker	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, the tertiary amines such as trisisodecylamine, dimethyldecylamine, bis(hydroxyethyl)dodecylamine, bis(hydroxyethyl)tallowamine and bis(hydroxypropyl)dodecylamine are not capable of forming an amide with the carboxylic acids. Dependent claim falls herewith.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Forsberg (4844756).

Forsberg teaches the formation of a water in oil emulsion in which the emulsifier is the amide reaction product of a dicarboxylic acid, such as succinic acid, and an amine within the scope of the present invention (see claims and column 17, line 15 – column 18, line 6). Applicants intended use as a drilling fluid does not distinguish (In re Pearson 181 USPQ 641).

5. Claims 1-3, 9 and 10 rejected under 35 U.S.C. 102(e) as being anticipated by Hillion (6221920).

Hillion teaches a water in oil emulsion which comprises an amide product of an amine and a polycarboxylic acid (see example 6). Applicants intended use as a drilling fluid does not distinguish (In re Pearson 181 USPQ 641).

6. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Santhanam (6339048).

Santhanam teaches an invert emulsion drilling fluid which comprises the reaction product as dicarboxylic acids or tricarboxylic acids, including citric acid, (column 10, lines 10-59) with an ethoxylated amine or diamine within the scope of the present invention (column 10, line 60 - column 11, lines 65).

Claim Rejections - 35 USC § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santhanam (6339048).

Santhanam teaches an invert emulsion drilling fluid which comprises the reaction product as dicarboxylic acids or tricarboxylic acids, including citric acid, (column 10, lines 10-59) with an ethoxylated amine or diamine within the scope of the present invention (column 10, line 60 - column 11, lines 65). Santhanam differs from the

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present invention in that a specific bis- hydroxyethylamine, such as those of claim 6, is not disclosed. However, Santhanam teaches amines of formula I, wherein $x+y$ is most preferably 2-20 (column 11, lines 1-38) are used to react with the polycarboxylic acid to form the reaction product. It would be obvious to one of ordinary skill in the art to utilize various compounds of formula I, wherein $x+y$ is 2, given the teaching of Santhanam that such compounds are preferably used to react with the polycarboxylic, to form the reaction product of the invert drilling fluid.

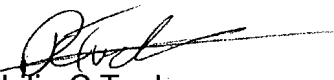
8. Applicants arguments have been considered but are not deemed fully persuasive. Applicants arguments with respect to Cooperman are deemed persuasive, since Cooperman seems to direct the product to esters and not amides. With respect to Santhanam, there is no direct teaching that the product must be an ester. In view of applicants claim 6 teaching that amides are formed from the same alkoxyated amines, that applicant is stating is not able to form an amide in Santhanam, it is not clear if applicants product is a traditional amide, or is an ester or salt. Three of the last four compounds of applicant's claim 6 teach the same hydroxyalkyl groups which applicant state make it impossible to form an amide. The rejection over Santhanam is retained, since a difference between the products therein and the present invention, cannot be made in light of applicants claim 6. New rejections are also presented.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-2944